Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

SOCIETY PROCEEDINGS

THE HELMINTHOLOGICAL SOCIETY OF WASHINGTON

The twenty-seventh regular meeting of the Society was held at the residence of Doctor Hall, Oct. 22, 1915, Doctor Hall acting as host and Dr. N. A. Cobb as chairman.

The following resolution was approved by the Society:

WHEREAS, Unnecessary changes in the names of host animals add to existing difficulties and confusion in the study of the parasites of these hosts, therefore be it

Resolved, That the Helminthological Society of Washington approves and endorses the official lists of such generic names as authorized by the Zoological Congress at Gratz, and urges that helminthologists use the approved names in their publications.

Dr. B. H. Ransom presented the following note on a third American case of *Dipylidium caninum* in man:

Under date of Sept. 15, 1915, Dr. L. T. Cassidy of Norwich, Conn., forwarded to the Zoological Division of the U. S. Bureau of Animal Industry for determination some segments of a tapeworm passed by a Polish child aged 1½ years. On examination the tapeworm proved to be *Dipylidium caninum.* This apparently is the third case in man to be reported from the United States. Stiles (1903c) reported a case in a 16-months old child at Detroit, Mich., and Riley (1910)* a case in an 11-year old boy at Ithaca, N. Y.

This tapeworm is a common parasite of dogs and cats, but comparatively rare in man, altogether less than 100 human cases having been reported. Most of the cases of infestation in man have been of children less than 3 years old. Infection undoubtedly occurs as a result of ingesting infested lice (*Trichodectes canis*) or fleas (*Ctenocephalus canis*). The chances of swallowing these insects are of course greater in the case of children than of adults, which probably explains the greater frequency of infestation in the former. As an indication of the frequency of infestation in dog fleas it may be of interest to note that in July, 1912, I examined 21 fleas from a dog which was heavily infested with *Dipylidium caninum;* two of the fleas were found to harbor cysticercoids, one in one case, and seven in the other.

Doctor Ransom also presented the following list of parasites from the Island of Guam:

During the last year the Zoological Division of the U. S. Bureau of Animal Industry has received from Dr. L. B. Barber of the Guam Agricultural Experiment Station, a number of specimens of parasites for identification. The following species were represented among these specimens:

Trematoda.—*Fischoederius cobboldii* (?), cow; tentative determination. *Fasciola hepatica,* cow. *Fasciola sp.,* carabao; resembles *F. gigantea* in form, but is smaller.

Cestoda.—*Davainea echinobothrida,* chicken.

Nematoda.—*Oxyuris equi,* horse. *Stephanurus dentatus,* pig. *Metastrongylus apri,* pig. *Trichuris* sp., pig; apparently not *T. crenatus. Tetrameres fissispinus,* chicken. *Cheilospirura nasuta,* chicken. *Ascaridia perspicillum,* chicken. *Heterakis vesicularis,* chicken. *Oxyspirura mansoni,* chicken.

---

* Science, 31:349.

Arthropoda.—*Menopon trigonocephalum,* chicken. *Goniocotes gigas,* chicken. *Dermanyssus gallinae,* chicken. *Haematopinus tuberculatus,* carabao. *Margaropus caudatus* (?), cow; tentative determination.

Protozoa.—*Theilaria parva* (?), cow; tentative determination.

Dr. C. W. Stiles presented a note by Stiles and Graves on the lung capacity of children in the city of X. It was found on spirometer examination of 1,618 white school children, that from 6 to 13 years old (primary and grammar school age) the boys average from 100 to 200 c.c. greater lung capacity than the girls. From 14 to 17 years (high school age—an athletic period) the boys have progressively from about 300 to about 1,100 c.c. greater lung capacity than the girls, a striking increase.

From 6 to 13 years old inclusive, the yearly increase in the lung capacity of the girls is very similar to that of the boys, but at 14 there develops a distinct decrease of this increase, and from 14 to 17 years inclusive, the annual increase averages distinctly less than for the years 6 to 13.

The decrease of the increase at 14 years in the girls follows immediately on the average age of beginning menstruation (13.2 years) and corresponds with the decrease of the increase in height (sitting and standing) and weight.

There is a slight irregularity of the increase curve at 11 in both boys and girls, corresponding to the irregularity found for the same year in the curves for height (sitting and standing) and weight in the boys, and for sitting height in the girls.

In the case of both the boys and the girls, children from homes provided with better sanitation (sewer) have a tendency (total, 15 to 9; boys 8 to 4, girls 7 to 5; estimated in year groups) to greater lung capacity than the children from homes with poorer sanitation (privy; total, 9 to 15; boys 4 to 8, girls 5 to 7).

In cases of intestinal infection it was not evident that hookworm, *Ascaris Lamblia,* or *Endameba coli* has any noticeable effect on the spirometer tests. While pupils with whipworm infections showed a preponderance of tests lower than the average, the number of cases is so small that conclusions are of doubtful value.

Doctor Stiles stated that findings formerly reported to the effect that chewing tobacco decreases and smoking increases with improved sanitation has been found to be true for city children as well as country children.

He presented another note setting forth the fact that in a study of the weight and the standing and sitting heights of a number of children, those with light hookworm infestations were found to be below the average in 91 markings and above in 68.

Doctor Stiles presented the following findings in an extensive study of the blood of 295 boys, from 6 to 17¾ years old, and of 279 girls in the city of X: The red blood cells are below the accepted normal for adults, being 4,617,000 for the boys and 4,678,000 for the girls. In 234 boys from homes with good sanitation (sewer), the red count was 4,633,000; in 51 boys from homes with poor sanitation (privy), the red count was 4,591,000. In 200 girls from homes with good sanitation (sewer), the red count was 4,752,000; in 74 girls from homes with poor sanitation (privy), the red count was 4,498,000. The lowest red count for a boy was 2,912,000; the lowest for a girl was 3,536,000. The hemoglobin averaged 86 per cent. for the boys and 87.4 per cent. for the girls. In 234 boys from homes with sewer the hemoglobin was 86.7 per cent.; in 51 boys from homes with privy the hemoglobin was 84.4 per cent. In 200 girls from homes with sewer the hemoglobin was 87.7 per cent.; in 74 girls from homes with privy the hemoglobin was 87.5 per cent. The highest hemoglobin index among the boys was 115 per cent. and the lowest 52 per cent.; the highest hemoglobin index among the girls was 128 per cent. and the lowest 40 per cent.

Although the standard number of white cells is regarded as 5,000 to 7,000, the average for the 295 boys was 8,012, and that for the 274 girls was 7,734. In a general way the increase in white cells is indicative of infection, poor condition, and the like. The 234 boys from homes with sewer showed a white count of 7,680; the 51 boys from homes with privy showed a white count of 8,687. The 200 girls from homes with sewer showed a white count of 7,731; the 74 girls from homes with privy showed a white count of 7,771. A differential white count, the most extensive ever made on children, was also part of the study. The average count for the 295 boys was as follows: Polymorphonuclear neutrophils, 52.06; eosinophils, 6.32; large mononuclears, 6.41; small mononuclears, 32.53; transitionals, 2.18; basophils, 0.47. The average for the 279 girls was as follows: Polymorphonuclear neutrophils, 53.2; eosinophils, 5.43; large mononuclears, 5.92; small mononuclears, 32.89; transitionals, 2.11; basophils, 0.51. The extreme high counts for the different types of cells in individual children were as follows: Polymorphonuclear neutrophils among the boys, 79; among the girls, 78.8; eosinophils among the boys, 27.2; among the girls, 26; large mononuclears among the boys, 32.5; among the girls, 36.5; small mononuclears among the boys, 65.8; among the girls, 60; transitionals among the boys, 10.4; among the girls, 7.6; basophils among the boys, 2.4; among the girls, 7.5. The extreme low counts for individual children were as follows: eosinophils, none; large mononuclears, none; transitionals, none; basophils, none; neutrophils, 18; small mononuclears, 2.

Details of this blood study will be published in *Public Health Reports*.

Doctor Hall presented notes on the following subjects: The city of X in the county of Z; A case of spurious parasitism.

Doctor Cobb exhibited a Spencer portable microscope.

Doctor Cobb presented a note bearing on parthenogenesis. Maupas in 1900 published a study of such nematode species as usually present only females, and in which the same gonad produces sperm cells and later eggs. Cobb calls this kind of hermaphroditism, syngonism, stating that, including the cases observed by Schneider, Bütschli, Claus, Maupas, himself, and others, the number of syngonic nematode species has now risen to several scores, and that there are excellent reasons for believing that syngonism is very common among free-living nematodes—is in fact the prevailing condition in numerous large genera. He suggests that supposedly parthenogenetic forms in general should be carefully reexamined with a view to determining whether some of them are not actually syngonic. He exhibited a figure of one of a series of syngonic free-living nematodes, showing consecutive processes of sperm and egg production, and said that he had series of species in which the spermatozoa to be found are smaller and smaller until they reach the optical limits of present instruments and methods, so that he finds himself in the position of being unable to assert the non-existence of spermatozoa in certain nematodes simply because he does not succeed in finding them. The researches naturally suggest the possibility that small spermatozoa may in the past in some cases have been overlooked.

Doctor Cobb also presented a drawing showing the mechanism of the spinneret of a free-living nematode. This mechanism, not heretofore understood, consists of a vesicle with an outlet controlled by a "needle-valve"—not, however, a free part as in machine valves. A somewhat needle-like plug seems to be forced into the outlet aperture by the pressure of the caudal secretions passing into the vesicle. To open the valve and permit a flow of secretions, the "needle" is withdrawn by retractor muscles passing from the proximal end of the needle obliquely forward to the dorsal wall of the tail.

MAURICE C. HALL, *Secretary.*